Table G.49. Constituents Categorized by Mobility (K_d) Classes

Mobility Class 1 (K_d = 0.0 mL/g)		
Constituent	**K_d Estimate**	**Reference**
Chromium	0.0	Strenge and Peterson (1989)
Fluoride	0.0	Strenge and Peterson (1989)
Nitrate	0.0	Strenge and Peterson (1989)
1,1,1-tetrachloroethane	0.09–0.13	Derived for K_{oc} using methods in Strenge and Peterson (1989). K_{oc} Properties from Mabey et al. 1982
Xylene	0.18–0.21	Derived for US EPA GEMS, VP-1,2, K_d methods
Toluene	0.14–0.26	Derived for K_{oc} using methods in Strenge and Peterson (1989). Properties from Mabey et al. 1982
Methylene chloride	0.005–0.007	Derived for K_{oc} using methods in Strenge and Peterson (1989). Properties from Mabey et al. 1982
Mobility Class 2 (K_d = 0.6mL/g)		
There are no constituents in this mobility class.		
Mobility Class 3 (K_d = 1.0 mL/g)		
Diesel fuel	2.7–3.95	Derived for K_{oc} using methods in Strenge and Peterson (1989). Physical properties are set to those for 2-methyl napththalene[(a)] – U.S. EPA GEMS, VP-1,2, K_d methods
Hydraulic fluid	8.4–12.4	Derived for K_{oc} using methods in Strenge and Peterson (1989). Physical properties are set to those of anthracene (Radding et al. 1976).
Oil	8.4–12.4	Derived for K_{oc} using methods in Strenge and Peterson (1989). Physical properties are set to those of anthracene (Radding et al. 1976).
Mobility Class 4 (K_d = 10.0 mL/g)		
There are no constituents in this mobility class.		
Mobility Class 5 (K_d = 40.0 mL/g)		
Lead	234	Strenge and Peterson (1989)
Mercury	322	Strenge and Peterson (1989)
PCB	369–539	Derived for K_{oc} using methods in Strenge and Peterson (1989)

(a) unknown.
PCB = polychlorinated biphenyl.